

Request For USDA State & Private Forestry Grant

Applicant: Georgia Forestry Commission P.O. Box 819 Macon, GA 31202

Project Name: Integrated Green Infrastructure Management System

Project Lead: Gary White, Sustainable Community Forestry Program, 706-356-4479, gwhite@gfc.state.ga.us

Project Proposal Abstract: The Okefenokee Swamp and surrounding coastal plain region, consisting of northern Florida, southeast Georgia and southern South Carolina, is a biologically diverse area that includes working forests and farms, pristine estuaries and coastal communities. Rapid growth, development and conversion of these natural areas to other uses threaten this unique region. Through this project, a synergistic system to identify, link and collectively manage these diverse ecosystems will be developed. Recent historic wildfires highlight the need to evaluate methods of resource management, land-use planning, and wildfire protection. An assessment of these natural areas and rural-urban interface communities will enable resource managers and land-use planners to develop a Green Infrastructure (GI) Management System to provide for the social, economic, ecological and cultural needs of present and future generations.

Partnering Agencies and Groups / Individuals: Georgia Forestry Commission, U.S. Fish and Wildlife Service, U.S. Forest Service, Greater Okefenokee Association of Landowners, U.S. Dept. of Defense, DCA, RDC, RC&D, DNR, UGA, Georgia Urban Forest Council, South Carolina Forestry Commission, Florida Division of Forestry

Project Location: The Okefenokee Swamp and surrounding coastal plain region, consisting of northern Florida, southeast Georgia and southern South Carolina. Focus areas include cities and counties impacted by the Okefenokee Swamp wildfires (especially Charlton, Ware, and Clinch Counties) and also those counties adjacent to Interstate 95. Congressional District: Jack Kingston (Dist. 1)

Expected Completion Quarter: Q4 2010

Total Federal Funding Request: \$103,000

**Total Proposal Budget
(Including Matching Funds):**

Cost Category	Requested Funds	Matching Funds	Total
Personnel	\$0	\$40,000.00	\$40,000.00
Materials & Supplies	\$5,000.00	\$5,000.00	\$10,000.00
Travel	\$0	\$3,000.00	\$3,000.00
Consultants	\$80,000.00	\$40,000.00	\$120,000.00
Overhead / Administration	\$16,000.00	\$7,000.00	\$23,000.00
Equipment Usage / Rental	\$0	\$50,000.00	\$5,000.00
Printing	\$2,000.00	\$5,000.00	\$7,000.00
Other	\$0	\$0	\$0
TOTALS	\$103,000.00	\$105,000.00	\$208,000.00

Project Description and Benefits

Unusual wildfire occurrence and rapid development along the I-95 corridor characterize Coastal Georgia and adjacent states. In this region the Okefenokee Swamp, Osceola National Forest, Kings Bay Naval Base, Fort Stewart and Savannah National Wildlife Refuge are classic regional hubs in a Green Infrastructure (GI) system that link coastal areas with inland forest lands through regional Watershed Basins.

Recommended Forest Management with in the Green Infrastructure system:

- An integrated regional approach to encourage communities to develop a community forestry plan and to utilize smart growth concepts to protect and increase canopy cover. Outreach efforts in this region would strive the link these communities in a common regional focus of conserving and protecting our natural resources.
- Longleaf pine reforestation and agroforestry. This combination is recommended as buffers adjacent to GI hubs and urban development to improve biodiversity, reduce the destructive effects (on forests and structures) of unusual wildfires, and promote forest health.
- Regionally based assessment, treatment, and monitoring of forest insect, disease, and invasive species will promote and improve forest health in the region.
- Preserving canopy and reducing the conversation to impervious surface during development, this integrated approach will lead to improved water quality by conserving forest resources in central hubs and the connecting watershed basin's links within the region.

The **Integrated Green Infrastructure Management System** project is designed to benefit the forest in the following ways relative to our national interests:

Enhance Working Forest Landscape – Increase management contacts and programs on industry and private lands to encourage prescribed burning and planting of fire resistant longleaf pine. Conservation easements and county planning tools will be an interregional part of the GI plan to protect working forest. The development of regional forecasts for resource demands for planning regions that will be designed to reflect jurisdictional boundaries and economic interdependences as well as hydrologic boundaries. Well developed GI plans in this region may result in less forest fragmentation and land conversion.

Protect Forest From Harm – Increased prescribed burning will result in a fuels management program. Longleaf planting reduces monoculture. Urban forests will be better managed. Plans will be developed for invasive species mitigation

Enhance Benefits Associated With Trees & Forests – Promoting environmental literacy and partnership building are important supporting activities to increase public understanding of the benefits provided by trees and forests. This will build support for managing forests to secure those benefits, and leverage federal resources. Use of community forestry concepts will reduce the rate of conversion to impervious surfaces thus increasing infiltration of storm water. GI will enhance the opportunity to use green space for recreational areas and services. Community tree planting programs and canopy protection practices will result in reducing heating and cooling cost and provide a buffer against climate change.

The proposed project will have a positive impact on the following regional issues:

Fractured Forests – GI links the established protected hubs using conservation easements to create corridors along the linking watersheds and provides for contiguous forest areas.

Wildland Fire and Forest Fuels – Fuels management through more prescribed burning and species selection and development of regional and community wildfire protection plans.

Changing Forest Products' Markets – Educational and outreach components of this proposal will highlight opportunities for forest landowners to participate in carbon registry programs and demonstrate the value of forests in providing environmental services. With a Watershed basin focus and utilizing established programs (i.e. Stewardship, Firewise, Tree Farm, Tree City USA, Federal Cost-sharing, SCFP, the state Water Plan, etc.), local and regional long-range management plans will be developed that address conserving natural resources that will continue to provide the economic, social, recreational, and environmental benefits for current and future generations.

Forest Health – Increased and integrated management contacts will enhance and protect the health of the forests within and near the region. Monitoring and control of insects, diseases and invasive species will be an important component of the Green infrastructure system.

Water Quality and Quantity – Protection of swamps, rivers, estuaries and coastal marshes will protect regional water quality. Community Forestry efforts will result in maintenance of canopy cover in developing areas and lower rate of conversion to impervious surfaces.

Project Evaluation Criteria Discussion:

The Integrated Green Infrastructure Management System project meets the established criteria in the following ways:

National and Regional Relevance – Project's dual purpose will mitigate loss of Greenspace and natural resource damage from Urban Sprawl and wildfires.

Prioritization – the Southern Forest Resource Assessment has identified urbanization in the coastal region as one of the major threats to the forest. This proposal will help mitigate that threat.

Meaningful Scale – This proposal covers areas in three states, Federal, state and local jurisdictions and in multiple ecosystems. This proposal will benefit both rural and urban citizens within these jurisdictions.

Collaboration – This proposal will involve integrated collaboration with diverse partnerships to be successful. Government (local, state, and federal), industry, private resource managers and landowners, environmental and other non-profit groups, as well as community planners will need to work together to plan and implement the Green Infrastructure system for this region.

Outcomes – A comprehensive plan that addresses growth management and resource conservation across geographical and jurisdictional boundaries, including an analysis of current land-use policies and practices. Other outcomes include stakeholder meetings, prioritization and mapping of key landscapes, identification and mapping of greenspace and transportation corridors, development of Community Wildfire Protection Plans and incorporation of Firewise practices at the community level.

Technology – GIS technology will be very important in designing and managing the Green Infrastructure system

Integrated Delivery – Tree City, Firewise, Forest Stewardship Forest Legacy, Quality Growth Resource Teams, Georgia Conservancy "Blueprints for Communities" RCD and NRCS all have programs that can be integrated into a Green Infrastructure system.

Leverage – See budget on page one.

Influence Positive Change – Green Infrastructure and regional management schemes will influence land-use decisions and result in sustainable forests and communities well into the future.

Timelines – Third Quarter fiscal year '08- receive funding
First Quarter '09- contact potential partners
Second and Third Quarters '09- Stakeholder meetings
Fourth Quarter '09 GIS Mapping
Fourth Quarter 2010- Completed GI Management Plan

**Project Evaluation Criteria
Discussion (Continued):**

Predictions indicate that the population of Georgia will almost double in the next 20 years, with much of this growth occurring along the coast and a corridor along Interstate 95. The Georgia Forestry Commission will be instrumental in helping the State manage this growth by leading a Green Infrastructure style management system in Southeast Georgia, Northern Florida and into South Carolina.

An Integrated Green Infrastructure Management System will enable partners to cross geographical and jurisdictional boundaries and to explore new and exciting methods to address the needs of this growing population while managing and conserving natural resources. New and innovative partnerships will have to be developed and coordinated between state and federal agencies, industry, environmental groups and land trusts as well as builders, developers and communities. GIS technology will be important to identify and map the available critical forested areas, urban forests, watersheds and other greenspace. Programs within the GI system such as Forest Legacy and Stewardship along with traditional forest management programs and Forest Health will have to coordinate along with the Sustainable Community Forestry Program and Forest Protection department to address the varied and changing needs of forest landowners, communities and other agencies that manage natural resources or assist communities in land use planning.

A regional approach to management and land-use planning will allow the states to address critical issues that will arise as a result of growth and development at a larger scale that will allow for a more sustainable future of the resources and the associated communities. An Integrated Green Infrastructure Management System coordinated by the Georgia Forestry Commission will result in a healthier, less fragmented forest that will provide for the benefits and safety for the citizens of the State and Nation well into the 21st century and beyond.